Tests of Gun in King Killing Are Inconclusive

MEMPHIS, July 11 - After hearing that initial ballistics tests were inconclusive, a judge today held out the possibility that he might order more testing of the high-powered rifle that prosecutors believe was used by James Earl Ray to assassinate the Rev. Dr. Martin Luther King Jr.

In their crusade to win a trial for Mr. Ray before he succumbs to liver disease, lawyers for Mr. Ray are counting heavily on their ability to demonstrate that the rifle, a Remington .30-06, which was marked with Mr. Ray's fingerprints, did not fire the shot that killed Dr. King on the balcony of the Lorraine Motel in Memphis on April 4, 1968.

The rifle was found in an entryway near the boarding house where Mr. Ray had rented a room, and where prosecutors believe he fired the fatal shot from a bathroom window. Mr. Ray initially pleaded guilty to the killing and was sentenced to 99 years in prison. He then quickly recanted and said his lawyers had pressured him to confess so he would escape the death penalty.

The rifle was tested twice previously, once by the Federal Bureau of Investigation shortly after the shooting and once by the House Select Committee on Assassinations in its investigation in 1977. Both studies failed to conclude definitively whether the fatal bullet, now in three fragments, had been fired by the rifle.

On Feb. 20, Judge Joseph B. Brown Jr. of Shelby County Criminal Court ruled that Mr. Ray's lawyers could have the rifle tested again, on the chance that newly developed electron-scanning techniques might find microscopic markings that could not previously be detected. But at a contentious hearing today, a member of the team of ballistics experts who tested the rifle on May 16 testified that he still could not say whether the weapon had fired the fatal shot.

"We are inconclusive on the findings for what we have done up to this point," said Robert A. Hathaway, one of three experts who were hired by Mr. Ray's lawyers to compare the fatal bullet with the 18 test rounds fired in a Rhode Island laboratory.

What captured Judge Brown's attention, however, was Mr. Hatha-

way's assertion that 12 of the 18 test bullets bore what the expert described as "a reference point," a raised mark that was distinctive but fell short of the kind of groove or striation normally used to match a bullet with a gun. The bullet that killed Dr. King does not show the same marking, Mr. Hathaway said.

Mr. Ray's lead lawyer, William F. Pepper, said this first finding of a distinction between the fatal bullet and test bullets fired by the rifle "was a major breakthrough." But Mr. Pepper's own expert, Mr. Hathaway, said the markings were probably caused by copper deposits left inside the barrel of the gun by heated bullets as they passed through it.

He said he had not taken steps to

No easy answer on whether a rifle fired a fatal shot nearly 30 years ago.

clean the deposits because he was worried that doing so would alter the inner surface of the barrel, compromising future efforts to use the gun as evidence. Another possibility is that the barrel has a permanent defect that should leave similar markings on any bullet fired through it.

After a nearly four-hour hearing, Judge Brown deferred ruling on the request by Mr. Ray's lawyers for more gun tests. He ordered the lawyers and county prosecutors to return to court next Friday with more information about whether a variety of barrel-cleaning techniques, including the use of brushes and solvents, might clear away the deposits without altering the inside of the gun.

He also instructed them to petition the Government for the return of bullets fired in the initial tests by the F.B.I. Today, ballistics experts testified that it would be useful to see whether the markings found in the May tests were on bullets that were fired shortly after the assassination.

But both Mr. Pepper and John

Campbell, an assistant district attorney, said today that they believed that the F.B.I. test bullets might be part of the House committee's evidence, which was sealed for 50 years after its inquiry was completed.

Today's hearing featured vigorous cross-examination of Mr. Hathaway and two prosecution gun experts by Judge Brown, who demonstrated a detailed knowledge of the science and terminology of ballistics. Asked in his chambers during a recess how he had gained his expertise, the judge pointed to a firing range target hanging on his closet door that had been sprayed with 50 rounds in and around the bull's-eye. He opened the door to display seven hunting rifles.

The judge said he owned nearly 50 rifles and handguns. "I like to shoot," he said. "Been doing it 30 years. I've studied it up, down, all around."

When prosecutors objected to his aggressive cross-examination of witnesses, the judge injected a sense of historical import to an otherwise dry proceeding about bullet markings and gun cleaning.

"Dr. King is dead, in his grave, a national hero, a world hero, a national holiday named after him," Judge Brown said. "And I'm not going to allow the vicissitudes of somebody's artful cross-examination to keep me. as the trier of fact, from getting to the bottom of this. Overruled."

Now 69, Mr. Ray has recently won vigorous support from Dr. King's family, led by Dr. King's 37-year-old son, Dexter Scott King. After being persuaded of Mr. Ray's innocence by Mr. Pepper, Mr. King and his family have asserted that Mr. Ray was uninvolved in the assassination plot, which they contend was hatched by the Federal Government.

Although the King family supports measures that might win a new trial for Mr. Ray, Mr. Campbell, the prosecutor, said after today's hearing that he saw no reason for further testing of the rifle.

"I've seen nothing to convince me that it would solve anything other than run up a bill and increase the controversy," he said. "It will not answer any questions."